

## **REMARKS**

Claims 1, 2 and 6-21 are currently pending in the present application. Claims 1 and 17 are amended herein which finds support at page 15, line 12, page 18, line 25 through page 19, line 2 and page 35, lines 8-12. With respect to the emulsifier polymer recited in amended claim 1, the limitations of original claims 9-11 have been incorporated into claim 1. Claim 9 has been amended for clarity. Applicants submit that no new matter has been added by way of the present claim amendments.

### ***Submission of Drawing Under the Second Sentence of 35 U.S.C. 113***

Applicants respectfully submit herein a copy of Figure 1. Figure 1 is a microscopic photograph of the product of Example 5, which is referred to in the original specification at page 57, lines 5 and 8. The drawing is not necessary for the understanding of the invention, but the subject matter sought to be patented admits of illustration by drawing and the Applicant has not previously furnished a drawing.

The drawing is filed in compliance with 37 C.F.R. 1.81(c) and contains NO NEW MATTER.

### ***Rejections under 35 U.S.C. §112, Second Paragraph***

Claim 9 is rejected under 35 U.S.C. §112, second paragraph as being indefinite. Specifically, the Examiner states that the phrase “a vinyl monomer having a carboxyl group or a salt thereof” is recited twice.

Claim 9 has been amended to clarify that the vinyl monomer is incorporated into each of segments (a) and (b). Claim 9 represents an emulsion wherein one component is directed to a copolymer of (a) an ester of (a1) a polyalkylene glycol and (a2) a vinyl monomer having a carboxyl group or a salt thereof; and (b) a vinyl monomer having a carboxyl group or a salt thereof. In short, said copolymer is a copolymer of (a) and (b), wherein (a), the ester, comprises (a1) and (a2). In

view of the further explanation of the claim language, Applicants submit that the Examiner's concerns have been fully addressed and request withdrawal of the outstanding rejection.

***Rejections under 35 USC §102 (b) and 35 USC §103(a)***

(1) Claims 1-6, 8, 11 and 13-20 stand rejected under 35 U.S.C. § 102(b) as anticipated by, or in the alternative under 35 U.S.C. § 103 as obvious, over **EP 0 623 670** (EP '670).

(2) Claims 1-20 stand rejected under 35 U.S.C. § 103 as being unpatentable over **EP '670** in view of **EP 1 162 255** (EP '255) or **Takiguchi et al. US 7,105,477** (Takiguichi US '477).

(3) Claims 1-8, 11, 13-17, 19 and 20 stand rejected under 35 U.S.C. § 102(b) as anticipated by, or in the alternative under 35 U.S.C. § 103 as obvious, over **Grifo et al. US 3,328,309** (Grifo US '309).

(4) Claims 1-8, 11-17, 19 and 20 stand rejected under 35 U.S.C. § 103 as being unpatentable over **Grifo US '309**.

Applicants respectfully traverse each of the above rejections.

**Legal Standard for Determining Anticipation**

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "When a claim covers several structures or compositions, either generically or as alternatives, the claim is deemed anticipated if any of the structures or compositions within the scope of the claim is known in the prior art." *Brown v. 3M*, 265 F.3d 1349, 1351, 60 USPQ2d 1375, 1376 (Fed. Cir. 2001) "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Legal Standard for Determining Prima Facie Obviousness

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

“There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art.” *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998) (The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a *prima facie* case of obvious was held improper.). The level of skill in the art cannot be relied upon to provide the suggestion to combine references. *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999).

“In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification.” *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. “The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art.” *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also *In re Lee*, 277 F.3d 1338, 1342-44, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002) (discussing the importance of relying on objective evidence and making specific factual findings with respect to the motivation to combine references); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

#### *The Advantages of the Present Invention*

The present invention relates to a liquid detergent composition which is excellent in detergent power, has a low viscosity to be easily handled, is good at stability, is inexpensive, and exhibits no increased viscosity even if the composition is mixed with a small amount of water. The inventive composition contains a nonionic surfactant, water and an electrolytic salt and which is separated into two or more phases of a surfactant phase including a nonionic surfactant and an aqueous solution phase including an electrolytic salt, the phases being incompatible with each other, with stability and a low viscosity. The present inventors have surprisingly and unexpectedly found that use of a specific polymer makes it possible to produce an emulsion composition wherein droplets are stabilized and have attained the present invention.

#### *Distinctions Between the Present Invention and the Cited Prior Art*

The claims, as presently amended, now incorporate the subject matter of claims 9, 10 or 11 into independent claim 1. As such, rejections (1), (3) and (4) are rendered moot.

With regard to rejection (2), Applicants respectfully submit that EP '670, EP '255 and Takiguichi US '477 do not disclose or suggest the copolymer which is one component of the emulsion as presently claimed in claim 1.

Applicants submit that EP '670 does not at all disclose any copolymer as is one component of present claim 1. EP '255 discloses compositions having 32% of water in Examples 25 and 26. However, the emulsifier polymer used in Examples 25 and 26 is a graft copolymer of sodium polystyrene sulfonate and poly(acrylic acid/maleic acid), which is different from a copolymer of the present invention. In the remaining Examples, the compositions are different from the present invention in that water is not included and thus, the compositions are not emulsions.

In Takiguichi US '477, it is disclosed that compositions have 20% or less of water, especially, 2-6.4% in Examples. In compositions with such minimal presence of water, if the composition is mixed with a small amount of water, the viscosity of the composition increases and its liquidity decreases.

This is in contrast with the current invention, which has 20% or more water, exhibits no increased viscosity and has a low viscosity to be easily handled even if the composition is mixed with a small amount of water. See the present specification at page 4, lines 13-17.

In short, the composition of Takiguichi US '477 has a continuous phase of a nonionic surfactant, while the composition of the present invention has a continuous phase of water and has droplets of a nonionic surfactant in the water.

With regard to Grifo US '309, the copolymer present therein is a copolymer of vinyl methyl ether and maleic anhydride. However, the copolymer reacts with nonylphenol + 10 moles ethylene oxide surfactant.

Therefore, Applicants respectfully request reconsideration and withdrawal of the outstanding rejection.

#### Conclusion

In view of the foregoing, Applicants believe the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Monique T. Cole (Reg. No. 60, 154) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

By 

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Attachment: Figure 1